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ERICSSON INC.
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EXAMINER

GENACK, MATTHEW W

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/943,211	Applicant(s) HOFF ET AL.	
	Examiner Matthew W. Genack	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 6, 7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 6-7, and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 9-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li *et. al.*, U.S. Patent No. 6,591,301, in view of Haumont *et. al.*, U.S. Patent No. 6,233,458, further in view of Ekman *et. al.*, U.S. Patent No. 5,960,355.

Regarding Claim 1, Li *et. al.* discloses a method for controlling the processing of messages by a packet-based network gatekeeper in order to prevent said gatekeeper's processor from crashing, wherein messages relating to calls in progress are handled preferentially relative to messages relating to new calls (Abstract, Column 4 Lines 17-29, Column 5 Lines 19-29, Fig. 2). If the frequency of messages associated with new calls exceeds a certain threshold, then a practice known as "in-progress message favoring" may be invoked (Column 11 Lines 23-32). The message type (that is, a message associated with a new call or a call in progress) is determined by examining the message header (Column 11 Lines 33-45, Fig. 11). If the message is associated with a call in progress, it is placed in a progress queue and processed (Column 11 Lines 59-64). If the message is associated with a new call, then the message is discarded (Column 11 Lines 64-65). If in-progress message favoring has not been invoked (that is, the

aforementioned threshold has not been exceeded), then messages associated with new calls are processed. The gatekeeper's CPU load and available memory are criteria used in the method of the invention (Column 5 Line 49 to Column 6 Line 3, Column 8 Lines 4-26).

Li *et. al.* does not expressly disclose the handling of situations whereby a serving general packet radio service support node (SGSN) is re-started, nor the use of a SGSN as the gatekeeper.

Haumont *et. al.* teaches that a SGSN may need to be shut down after a malfunction or due to a high level of traffic in a packet-switched communication network (Column 4 Lines 31-49, Column 6 Lines 7-13, Fig. 6).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Li *et. al.* by using a SGSN as the gatekeeper, and by providing for the procedures of said invention to be performed after a switch off and switch on of a SGSN.

One of ordinary skill in the art would have been motivated to make this modification so as to ensure the smooth transition of information transfer after a SGSN re-start (Haumont *et. al.*: Column 4 Lines 31-32).

Neither Li *et. al.* nor Haumont *et. al.* expressly discloses the handling of situations whereby a BSS is re-started.

Ekman *et. al.* discloses a method pertaining to a wireless telecommunication system (Abstract, Column 5 Lines 18-30, Fig. 1).

Procedures for handling the restart of a radio base station are disclosed

(Column 9 Line 66 to Column 10 Line 13, Fig. 4).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Li *et. al.* as modified by Haumont *et. al.* by providing for the procedures of said invention to be performed after a restart of the BSS.

One of ordinary skill in the art would have been motivated to make this modification so as to ensure the smooth transition of information transfer after a SGSN re-start, namely, to avoid redundant information transfers and to avoid the loss of information intended for a given user (Haumont *et. al.*: Column 4 Lines 31-32).

Claim 6 differs substantively from Claim 1 in that the former Claim, instead of reciting a "first type" and a "second type", recites "accessing a table based on the read information element to determine a status of the read information element as either already known or unknown to said node". Li *et. al.* discloses the classification of messages as either associated with calls in progress (that is, calls already known to the gatekeeper) or associated with new calls (that is, calls not known to the gatekeeper), as outlined above in the rejection of Claim 1.

Regarding Claims 9-10, Li *et. al.* discloses that the gatekeeper's CPU load and available memory are criteria used for the threshold in the method of the invention (Column 5 Line 49 to Column 6 Line 3, Column 8 Lines 4-26).

Regarding Claim 12, Li *et. al.* discloses that the method is customizable such that messages associated with certain types of new calls (such as emergency calls) are not discarded (each procedure with a corresponding threshold) (Column 12 Lines 1-20).

3. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li *et. al.* in view of Haumont *et. al.*, further in view of Ekman *et. al.*, further in view of Maruyama *et. al.*, U.S. Patent No. 6,430,272.

Neither Li *et. al.*, nor Haumont *et. al.*, nor Ekman *et. al.* expressly discloses the incorporation of a local temporary logical link identity associated with a particular user terminal into a message.

Maruyama *et. al.* discloses a procedure for processing messages according to a user's wishes at a message processing apparatus in a communication system (Abstract, Column 1 Lines 6-14, Column 2 Lines 25-33). Said procedure includes the step of receiving a message having header information that indicates said message's type (regarding said message's content, sender's identity, etc.) (Column 9 Lines 20-29). It is determined whether or not the frequency of message managing operations associated with the receipt of messages by the user's information terminal, said messages having a predetermined characteristic, exceeds a threshold (Column 6 Line 33 to Column 7 Line 8). Messages having a certain characteristic may be handled normally (retained) if they are received at a frequency below a threshold, and deleted if they are received at a frequency above a said threshold (Column

30 Lines 9-56, Fig. 36). Furthermore, Maruyama *et. al.* discloses the use of predicate logical equations, associated with messages, in the execution of the procedure for message switching involving comparisons to a threshold (Column 2 Lines 40-54, Column 3 Lines 17-31, Column 10 Lines 38-52).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Li *et. al.* as modified by Haumont *et. al.*, as modified by Ekman *et. al.* by incorporating local temporary logical link identities associated with particular user terminals into messages.

One of ordinary skill in the art would have been motivated to make this modification in order to provide means by which a plurality of message processing procedures suitable for various users are easily met (Maruyama *et. al.*: Column 2 Lines 25-35).

4. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li *et. al.* in view of Haumont *et. al.*, further in view of Ekman *et. al.*, further in view of En-Seung *et. al.*, U.S. Patent No. 6,892,306.

Neither Li *et. al.*, nor Haumont *et. al.*, nor Ekman *et. al.* expressly discloses the use of an encrypted header.

En-Seung *et. al.* discloses a digital cryptograph and encryption process used in the context of a digital content transmission system (Abstract, Column 4 Lines 46-51). The invention may be used with wireless communication systems (Column 6 Lines 37-53, Fig. 2). En-Seung *et. al.*

discloses the use of an encrypted header field along with an unencrypted header field (Column 12 Lines 38-67, Figs. 12-13).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Li *et. al.* as modified by Haumont *et. al.*, as modified by Ekman *et. al.* by providing for a message that may have a second header that may be encrypted, and if the message frequency is below the threshold and the second header is not encrypted, handling the message in the normal way, and if the second header is encrypted, deleting the message associated with said second header.

One of ordinary skill in the art would have been motivated to make this modification because of the necessity of adequately dealing with messages that may either be malicious or not intended for the receiving party.

Response to Arguments

5. Applicant's arguments filed 13 October 2006 have been fully considered but they are not persuasive.

In regard to Applicant's assertion, on Page 7 of Remarks, that "Haumont does not teach or suggest providing any type of overload protection in packet communication networks after re-starts of an SGSN ...", Examiner directs Applicant's attention to the fact that Li *et. al.* discloses methods and systems for gatekeeper overload protection, while Haumont *et. al.* discloses a re-start procedure for a SGSN in cases of high traffic volume, as outlined above. Contrary to Applicant's assertion, on Page 8 of Remarks, that these references pertain to "two different and entirely distinct areas of network

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technology”, both references pertain to packet-switched networks for carrying voice communications. Contrary to Applicant’s assertion, on Page 8 of Remarks, that “the only teaching or suggestion that supports the combination of these references is found in the teaching of the present application”, Haumont *et. al.* provides the suggestion for combination (see above), as the SGSN shutdown scenario described in this reference is one involving a high traffic volume, and Li *et. al.* pertains to overload control routines. This motivation statement was used in the previous action, and Applicant did not provide any refutation, in the Remarks filed 13 October 2006, of said motivation statement.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Genack

Examiner

TC-2600, Division 2617



17 January 2007



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